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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,817	08/29/2003	Jack T. Baker	9687-5 (37786-186516)	2480

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EXAMINER

HALPERN, MARK

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/652,817

Applicant(s)

BAKER, JACK T.

Examiner

Mark Halpern

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/27/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1) Acknowledgement is made of Amendment received 5/23/2005. Claims 1, 4, 6-7, 9, 14, 17, 19-20 are amended, claims 13, 26 are cancelled, and new claims 27-28 are offered for consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 1-2, 7-12, 14-15, 20-25, 27-28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Prough (5,547,546).

Claims 1-2, 9-10, 14-15, 22-23, 27-28: Prough discloses a continuous digester system (as shown in Figure 1) that includes a chip bin 10 into which chips are introduced through the top inlet 31 and are discharged through the bottom outlet 32 to a digester. The chip bin is constructed of two parts, the upper part located above the vibrating cone baffle assembly, Vibra-Bin®, and the lower part, located below the Vibra-Bin®. The lower part of the bin is tapered. Steam is introduced into the bin through downwardly angled pipe 22 located in the upper part of the bin and from upwardly angled pipe 28 located in the lower part of the bin. A temperature sensor probe 25 is located in the chip bin. The sensing portion 41 of probe 25 is about 10 to 20 feet long

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and the probe bottom 42 is long enough to sense to about five feet below the level (top) of the chips in the chip column. Since the probe 25 goes across the level of the chip column sensing area, it should be as long as the typical level variation of the chips, that is, about ten to fifteen feet. It would have been obvious thus, to one skilled in the art at the time the invention was made, that the steam orifice 22 of Prough, would be above said level (Abstract, col. 1, lines 43-54, col. 5, lines 29-44, col. 6, lines 43-65, Fig. 1). Black liquor from the digester is introduced to the bin (col. 5, lines 1-9). An inline temperature sensor is located in the steam line 28 into the lower part of the chip bin, as shown in Figure 1.

Claims 7, 20: an inline temperature sensor is located in the steam line 28 into the lower part of the chip bin, as shown in Figure 1.

Claims 8, 21: black liquor from the digester is introduced to the bin (col. 5, lines 1-9).

Claims 11-12, 24-25: flow sensors and level controllers are disclosed. The controllers are interlocked with the steam application (col. 5, line 29 to col. 6, line 68).

3) Claims 3, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Prough in view of Leask (3,661,328). Prough is applied as above for claim 1, 14, Prough fails to disclose that the chip bin comprises steam orifices angled tangentially. Leask discloses chip bin 10 into which steam is introduced tangentially from cyclone separator 44 (Leask, col. 3, lines 32-54 and Figure 1). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of

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Prough and Leask, because such a combination would improve the distribution of wood chips in the bin of Prough due to the tangential steam flow of Leask.

4) Claims 4-6, 17-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Prough in view of Johanson (5,454,490).

Claims 4, 17: Prough is applied as above for claim 1, 14, Prough fails to disclose that the chip bin further includes conical baffles projecting from a wall of the bin.

Johanson discloses a bin 17 for accepting wood chips and wherein said bin are conical frustrums 24 projecting from the interior wall 20 (Johanson, col. 3, line 46 to col. 4, line 64, and Figure 5). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Prough and Johanson because such a combination would reduce the compression of the wood chips in the bin of Prough as disclosed by Johanson (Abstract).

Claims 5, 18: exhaust pipe is disclosed by Prough (Figure 1).

Claims 6, 19: each of the four levels where steam is introduced, as shown in Figure 3 of Johanson, represents a treatment zone.

Response to Amendment

5) Claims 1-2, 7-15, 20-26, are rejected under 35 U.S.C. 102(b) as being anticipated by Prough (5,547,546), have been withdrawn in view of amended claims.

6) Applicant's arguments with respect to claims 1-26, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

b) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Halpern
Primary Examiner
Art Unit 1731